

Curriculum Vitae

Sandra Barreira

1. Basic Information

Nationality: Argentina
Languages: Spanish - English
Gender: Female
Postal address: Argentine Naval Hydrographic Service (SHN) -
Meteorological Department/Argentine Navy
Meteorological Service (SMARA)
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2. Positions held:

2014 – present. Director of Research. Argentine Naval Hydrographic Service (SHN) - Meteorological Department (MD). Currently, five projects.

2009 – 2013. Principal Researcher/Scientist. SHN/MD - Director of two projects.

2006 – 2008. Associated Researcher/Scientist. SHN/MD- Director of two projects.

1988 - 2005. Assistant Researcher/Scientist. SHN/MD - In charge of several projects in different areas and the Numerical Modelling Centre.

1983 - 1987. Doctoral Scholarship of the National Council of Scientific and Technological Research. Department of Meteorological Sciences, University of Buenos Aires

1982 - 1990. Professor. Department of Meteorological Sciences, University of Buenos Aires (Subjects: Numerical Forecasting – Mathematical Analysis - Atmospheric Dynamics)

3. Expertise :

2001 - present. Antarctic and Arctic sea ice and climate. Ozono. Antarctic climatology. System tracking. Scientist in charge of the projects.

1998 - 2008. El Niño-Southern Oscillation. Scientist in charge of the projects.

1992 - 1997. Patagonia Winds. Scientist in charge of the projects.

1990 - 2001. Atmospheric Chemistry. Scientist in charge of the projects.

1988 - 2004. Numerical Modeling of the Atmosphere and Wave Modeling.
Scientist in charge of the projects and the Numerical Modeling Centre.

3. Publications

Book

S. Barreira, 2012: Variabilidad espacial y temporal del hielo marino antártico. Relación con la circulación atmosférica. (In Spanish. Spatial and temporal variability of Antarctic sea ice. Relationship with atmospheric circulation) Editorial Académica Española - AV Akademikerverlag GmbH & Co. KG, Germany, 493 pp, ISBN 978-3-659-02325-5.

Refereed Publications

S. Stammerjohn, T. A. Scambos, S. Barreira, et al., 2017: Antarctica [in “State of the Climate in 2016”]. Bull. Amer. Meteor. Soc 98(8), S1-S277. DOI:10.1175/2017BAMSStateoftheClimate.1.

S. Barreira y F. Orquera, 2017: Pronóstico del campo de hielo marino Antártico, Sesión Tectónica 18, Ciencias de la Criósfera, Libro del XX CONGRESO GEOLÓGICO ARGENTINO, 14-22.

Salgado, H., F. Carballo, S. Masuelli, B. Lorenzo, A. Scardilli, R. Miño y S. Barreira, 2017: Aplicación de sistemas de microondas para detección de hielo marino en la Antártida, Geotecnologías. Libro de Actas de XVII Simposio Internacional en Percepción Remota y Sistemas de Información Geográfica; editado por Walter F. Sione [et al.]. - 1a ed. - EdUnLu, 2017. Libro digital.

S. Stammerjohn, S. Barreira, G. O. Braathen, et al., 2016: Antarctica [in “State of the Climate in 2015”]. Bull. Amer. Meteor. Soc., 97(8), S1-S275. DOI:10.1175/2016BAMSStateoftheClimate.1.

Maier, E., S. Barreira y J. C. Simões, 2016: Análise da relação entre a $\delta^{18}O$ do Nevado Illimani com a distribuição espacial da precipitação sobre a América do Sul, Pesquisas em Geociências, Vol. 1, 5-16.

Maier, E.L.B., Costi J., Barreira, S., and Simões, J.C., 2016: Precipitação na América do Sul: médias climáticas e padrões da variabilidade no período entre 1979 e 2008. Revista Brasileira de Geografia Física, Vol 9, N° 1, 032-046.

Maier, E., S. Barreira y J. C. Simões, 2016: Relaciones entre las razones de isótopos de oxígeno en la nieve y el hielo del Nevado Illimani (Bolivia) con la variabilidad temporal de la precipitación sobre la América del Sur, Aprobado para su publicación durante 2016 en Pesquisas em Geociências.

R. L. Fogt, S. Stammerjohn, R. B. Alley, S. Barreira, et al., 2015: Antarctica [in “State of the Climate in 2014”]. Bull. Amer. Meteor. Soc., 96(7), S1-S267.

- R. L. Fogt, T. A. Scambos, S. Barreira, G. O. Braathen, D. H. Bromwich, et al., , 2014: Antarctica [in “State of the Climate in 2013”]. Bull. Amer. Meteor. Soc., Bull. Amer. Meteor. Soc., 95 (7), S1-S257.
- R. L. Fogt, T. A. Scambos, S. Barreira, et al., 2013. Antarctica [in “State of the Climate in 2012”]. Bull. Amer. Meteor. Soc., Bull. Amer. Meteor. Soc., 94 (8), S1-S258.
- Eder Leandro Bayer Maier, Sandra Barreira y Jefferson Cardia Simões, 2013: Zoneamento da Variabilidade Temporal da Precipitação na América do Sul Publicado en las actas del XV Simpósio Brasileiro de Geografia Física Aplicada: Uso e Ocupação da Terra e as Mudanças das Paisagens. CCHN. UFES, Vol 1, 1-9.
- R. Fogt, T. Scambos, S. Barreira, G. Braathen, et al. , 2012. Antarctica [in “State of the Climate in 2011”]. Bull. Amer. Meteor. Soc., Bull. Amer. Meteor. Soc., 93 (7), S1-S282.
- Maier, E. L. B. y Barreira, S.C., 2012. Precipitação na América do Sul. In: V Seminário do programa de pós-graduação em geografia (UFRGS), 2012, Porto Alegre. V SPosgea, 2012.
- R. Fogt, S. Barreira, D. Bromwich, J. Burrows, S. Colwell, et al., 2011. Antarctica [in “State of the Climate in 2010”]. Bull. Amer. Meteor. Soc., 92 (6), S1–S237.
- S. Barreira and R. Compagnucci, 2011: Spatial fields of Antarctic sea-ice concentration anomalies for summer-autumn and their relationship to Southern Hemisphere atmospheric circulation during the period 1979-2009, *Annals of Glaciology* (52) 57, 140-150.
- S. Barreira y R. Compagnucci, 2011: Determinación de los principales patrones espaciales de concentración de hielo marino antártico y su relación con la circulación atmosférica en el Hemisferio Sur. Libro digital XVIII Congreso geológico Argentino, 1272-1280.
- S. Barreira, 2011: Series temporales de concentración de hielo marino en la Antártida: correlación con la temperatura y presión de superficie global. Libro digital XVIII Congreso geológico Argentino, 1281-1293
- R. Fogt, S. Barreira, D. Bromwich, S. Colwell, K. Jezek, et al., 2010. Chapter 6: Antarctica in State of the Climate in 2009, Antarctica. Bull. Amer. Meteor. Soc., 91, 7, S1-S222.
- R. Fogt, S. Barreira, S. Colwell, J. Turner, H.Liu, R. Masson, et al., 2009: Chapter 5: The Poles in State of the Climate in 2008, Bull. Amer. Meteor. Soc., 90(8), S1-196.
- Barreira, S. and T. Scambos, 2009: Arctic sea ice spatial behaviour and climate, CONGREGMET X-CLIMET XIII, ISBN: 978-987-22411-1-7, 12 p.

- Barreira, S. y R. Compagnucci, 2009: Hielo marino antártico en invierno y primavera y la circulación del hemisferio sur, CONGREGMET X-CLIMET XIII, ISBN: 978-987-22411-1-7, 10p.
- T. Scambos, S. Barreira, S. Colwell, J. Turner, R. Fogt, H.Liu, et al., 2008: Chapter 5: The Poles in the State of the Climate in 2007, Bull. Amer. Meteor. Soc., 89(7), s1-s179.
- Barreira, S. and R. Compagnucci, 2007: Sea ice concentration temporal variability over the Weddell Sea and its relationship with tropical sea surface temperature, in Antarctica: A Keystone in a Changing World, edited by A. K. Cooper and C. R. Raymond et al, The National Academies Press; USGS Open-File Report 2007-1047, doi:10.3133/of2007-1047.srp029. ISSN: 0196-1497. ISBN-13 (DVD-ROM): 978-1-411-31788-8.
- T. Scambos, N. Adams, S. Barreira, et. al. H. Bromwich, K. Jezek, et al., 2007: Chapter 5: The Poles report of the State of the Climate in 2006, Bull. Amer. Meteor. Soc., 88(6), s1-s135.